Abstract

5

10

There is disclosed a honeycomb structure 1 having a plurality of cells 4 partitioned by cell walls 2 to function as fluid passages, a predetermined cell 4 being plugged by a plugging material at one end face, a remaining cell 4 being plugged by the plugging material at the other end face, wherein a Young's modulus of the plugging material is lower than that of the cell wall 2. A strength of the plugging material is lower than that of the cell wall. A porosity of the plugging material is 97% or more of that of the cell wall. There is provided a honeycomb structure whose end face is not easily cracked and which is superior in durability.